

Amendments to the Claims

Claims 1-17 (cancelled)

Claim 18 (original): An illumination system that provides illumination for a platen in a print scanner, comprising:

an illumination source array that emits light from a plurality of discrete light sources;
and

a light wedge having one end surface that receives light emitted from said illumination source array and a reflective surface that reflects light out of said light wedge toward the platen; whereby, uniform illumination is provided to the platen.

Claim 19 (original): The illumination system of claim 18, further comprising:

a diffuser provided near said light wedge such that light passing out from said light wedge passes through said diffuser before illuminating the platen.

Claim 20 (original): The illumination system of claim 18, wherein said reflective surface in said light wedge comprises a diffuse, reflective surface.

Claim 21 (original): The illumination system of claim 20, wherein said diffuse, reflective surface comprises one roughened surface of the light wedge coated by a layer of reflective paint.

Claim 22 (original): The illumination system of claim 19, wherein said diffuser comprises a holographic diffuser.

Claim 23 (original): The illumination system of claim 18, wherein said illumination source array comprises a plurality of sources that emit blue/green light.

Claim 24 (original): The illumination system of claim 18, wherein said plurality of sources are divided into at least a center region and a perimeter region, wherein the density of sources provided in said perimeter region is greater than in said center region.

Claim 25 (original): The illumination system of claim 18, wherein the intensity of each source can be independently controlled relative to other sources such that a flat, uniform illumination is provided to the platen.

Claim 26 (original): The illumination system of claim 18, wherein said plurality of sources is divided into at least three groups in at least three respective zones, whereby, the intensity of each group of sources can be independently controlled relative to other groups such that a flat, uniform illumination is provided to the platen.

Claim 27 (currently amended): A method for providing efficient, uniform illumination to a platen, comprising:

emitting light from a plurality of discrete sources;
~~randomizing at least part of the emitted light to obtain diffuse light;~~
~~collimating at least a part of the diffuse light to obtain collimated, diffuse light; and~~
~~passing the emitted light through a light wedge to obtain diffuse light; and~~
illuminating the platen with the ~~collimated~~ diffuse light such that an image of a print of a finger or palm placed on the platen can be obtained.

Claims 28-29 (cancelled)

Claim 30 (original): The method of claim 27, wherein said emitting step includes emitting blue/green light.

Claim 31 (original): The method of claim 27, further comprising prior to said emitting step, arranging said plurality of discrete sources into at least a center region and a perimeter region, wherein the density of sources provided in said perimeter region is greater than in said center region.

Claim 32 (original): The method of claim 27, further comprising independently controlling the intensity of each source relative to other sources such that a flat, uniform illumination is provided to the platen.

Claim 33 (original): The method of claim 27, further comprising:

arranging said plurality of discrete sources into at least three groups in at least three respective zones; and
independently controlling the intensity of each group of sources relative to other groups of sources such that a flat, uniform illumination is provided to the platen.

Claim 34 (cancelled)

Claim 35 (currently amended): For use in a print scanner, an illumination method for improving a range of grey scale shading, comprising:

emitting light in a blue/green spectrum from a plurality of discrete sources; and
illuminating a platen, having an object with a pattern of ridges and valleys thereon, with at least part of the emitted light in the blue/green spectrum.

Claim 36 (original): The method of claim 35, wherein the blue/green spectrum comprises a single wavelength equal to or approximately equal to 510 nm or a narrowband of wavelengths that includes a wavelength of 510 nm.

Claim 37 (cancelled)